

REMARKS/ARGUMENTS

Entry of the mentioned Muller declaration is solicited.

The claims now in the application remains 1 to 10.

The specification is amended at page 6, line 16, to replace "inhibitors" by the obviously required term "initiators"; please see lines 26 and 27.

The specification is also amended at page 13 to insert a paragraph setting forth the calculated salt percentages in the water in the reaction formulation before and after addition of the initiator, which is added with water.

ARGUMENTS

Reconsideration and withdrawal of the rejection of Claims 1-10 under 35 U.S.C. § 112, as being indefinite, are again requested.

In Applicants' view the terminology is in fact defined by the claim since the term "stabilizing inorganic salt" is inherently self-defining and is understood by the art to refer to salts required for the formation and stabilizing of dispersed polymer of a water soluble, please see the discussion on page 1 over to page 2 of the subject application.

The amount of stabilizing inorganic required according to the prior art is evident from the prior art of record. Thus, Fong et al. state at col. 5:

Addition of the inorganic salts is helpful to some extent for improving the stability and flowability of the resultant aqueous dispersion. This is presumably because the inorganic salt takes up moisture from the resulting polymer particles to compact and stabilize the individual polymer particles.

The salt aqueous solutions are generally at a concentration of 15% or more, preferably 20% by weight or more. The salt is typically present during the reaction in an amount between about 16.5 to about 18 weight % based on batch size. At the end of the reaction, more salt, typically in an amount between about 0.5 to about 5.0 weight %, is added. The amount of salt in the final reaction product is in the range between about 18.0 to about 22.5% by weight to the final product.

Please note that Fong et al. state that the salt solutions are generally used at a concentration of 15% or more. The amount is therefore ascertainable and it is evident that the amount of salt present in Applicants' reaction mixture can be suitably characterized as stated in the claims.

In WO 97/34933 of record it is stated at page 9, second paragraph, in discussing the use of stabilizing salt per preparing a dispersion of a water-soluble polymer, that

It will be seen by those skilled in the art that the selection of particular salt can be made by preparing a saturated solution of the salt or salts, and determining the solubility of the desired stabilizer and the desired polymer. In a preferred embodiment of the invention from 5-30 weight percent based on the weight of the dispersion of the salt, will be utilized. Preferably, 5-25 weight percent of the dispersion will be salt, and most preferably 8-20 weight percent of the dispersion will be salt. When using higher quantities of monomer less salt will be required.

It is evident that "substantially free of stabilizing inorganic salt" has a meaning in the relevant art and that the amount of salt present in Applicants' formulation is significantly less than the amount needed for stabilization according to the prior art.

Reconsideration and withdrawal of the rejection of Claims 1-7 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Fong et al. (U.S. 6,426,383 B1) are also requested.

Fong et al. state, at col. 13, that they obtain a dispersed polymer. But in no case do they disclose achieving the result without the use of salt, "generally at a concentration of 15% or more" (underlining supplied).

The unentered Muller declaration addresses this central issue. When Example I of Fong et al. was repeated omitting salt addition, a viscous solution, of increased viscosity with continued polymerization was obtained in fact. The omission of the salt does not therefore result in Applicants' dispersion. There is no anticipation.

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This is confirmed by Example 2 of Fong et al. It is stated in the paragraph at col. 2, line 10,

As the reaction proceeds, there is an increase in viscosity. A total of 100 g of $(\text{NII}_4)_2\text{SO}_4$ was added in portions through the reaction. 200 g of water was also added to the reaction mixture. The total reaction time is roughly 3-3.5 hours. The milky-white dispersion is then stored for further use. The mole ratio of NVF/ethyl hexylacrylate is from about 99/1 to about 90/10.

Notice the increase in viscosity despite the initial use of NaNO_3 , 40 g of Na_2SO_4 and 25 g of NaCl (Col. 16, lines 6 and 7). 100 g more of $(\text{NH}_4)_2\text{SO}_4$ was added to obtain the dispersed polymer.

Omission of the inorganic salt and its function, as the Muller declaration demonstrates, does not lead to Applicants' polymer when one operates according to Fong et al.

The last point advanced on page 3 of the Official Action, paper no. 11, would seem to require support by reference to the art itself. The prior art of record does not appear to recognize such an outcome in the substantial absence of salt.

Reconsideration and withdrawal of the rejection of Claims 8-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fong et al. (U.S. 6,426,383) in combination with Matsushima et al. (U.S. 5,936,042) are also requested.

The mere substitution of the stabilizers referred to for the Fong et al. stabilizer does not render the Fong et al. disclosure more relevant in respect to the central issues discussed above. Moreover, one would be guided by the Matsushima et al. statement (paragraph at col. 4, line 61) that:

The polymerization is preferably conducted in the presence of an inorganic salt in order to lower the viscosity of the obtained polymer dispersion.

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And please note that in Preparation Example 3, where, unlike Preparation Examples 1 and 2, a water soluble polymer was formed, no particles were obtained.

Favorable reconsideration is solicited.

Respectfully submitted,

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